Computer Systems, Inc.
MERCURY
The Ultimate Performance Machine

FPGA/ASIC/DSP Portability

1. **Choose language(s): VHDL? Both Verilog? No reqt? C for DCP**
   - Language with porting likelihood; including FPGA/ASIC?
   - Coding guidelines
2. **Define IDL subset suitable for these environments**
   - IDL does NOT imply CORBA
   - Reduce data types, exceptions, etc, etc.
3. **Define mapping from that subset to a language-specific "stub/skeleton" "port" interface.**
   - Interface specifics, generated to avoid overly generic interfaces
   - Common way to understand messages, headers, fields, length etc.
4. **Define mapping to "control" interface (aka "resource/config").**
   - Typical control (start/stop/configure), from SCA "resource"
5. **Define send/receive generic services**
   - Non-generated I/O support interfaces? (like ORB svcs?)
6. **Define environment (OE) services**
   - Clock issues, local memory issues, etc.
7. **Define deployment parameters for appropriate resources**
8. **SCA supplement "Portability Supplement for Specialized Hardware":**
   - that contains these things analogous to the sections that tell GPP/SW authors how to write their components